

RETEVIS

H777H
USER' MANUAL

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Functions

Scan

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Flashlight

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High/low power selection

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Battery save

Low battery alert

TOT

One-key pairing

CTCSS/DCS

Charging Attentions(1)

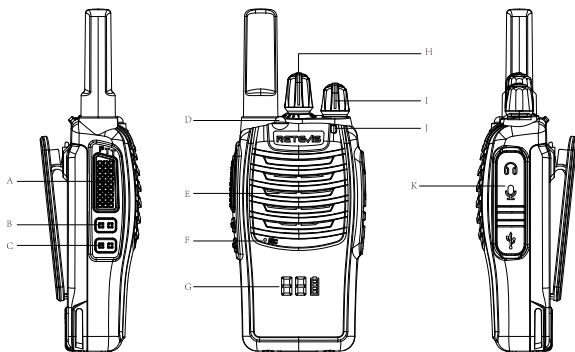
- The Li-ion battery does not charge at the factory. Before using the radio, please charge first at 5-40°C temperature.
- After purchasing or storing too long (more than 2 months), the Li-ion battery cannot reach its full use capacity when charging first. Charge and release two or three times, the normal charging and battery energy will be achieved.
- Before charging, please turn off the radio. Don't use the radio during charging. It will affect the normal Li-ion battery charging and cause accidents and dangers.
- After fully charged, remove the Li-ion battery from the charging base (or unplug the USB adapter). Don't charge for too long, it will shorten the battery life. Don't charge the battery before the radio runs out of power. Otherwise, it will damage the battery memory effect.
- The use time of the Li-ion battery does not increase in the fully correct charging. It refers to the battery life to the end. Please change or purchase another Li-ion battery.

Charging Attentions(2)

- First, plug the fire bull output adapter into the socket behind the charger. Then, plug the Fire Bull adapter into AC 110-220V power, and the charger indicator lights up green.
- Put the Li-ion battery or the whole radio into the charger, and ensure the Li-ion battery or the radio has a common connection with the charging terminal. When charging, the indicator lights up red. After fully charged, the indicator lights up green.

Note: the radio chooses to use the desktop charger to charge or use the Fire Bull to charge directly optional. When using the Fire Bull to charge, plug the Fire Bull adapter into AC 110-220V power first, then directly plug the Fire Bull output adapter into the USB charging port. When charging, the indicator lights up red. After fully charged, the indicator lights up green.

Familiar with Radio



A. PTT(PUSH-TO-TALK) Key

Press the key and speak towards the microphone to transmit.
Release the key to receive.

B. UP Key

Shortly press: Channel lock

Long press: Emergency alarm

C. Down Key

Shortly press: Flashlight

Long press: VOX

D. LED Torch

E. Speaker

F. Mic

G. Hidden display

H.Channel Knob---Rotate it to select the channel. No. 16 channel is the scanning channel.

I. POWER/VOLUME Knob

Clockwise rotate the knob to turn on the radio.

Anticlockwise rotate the knob to turn off the radio. Rotate the knob to adjust the volume.

J. LED Indicator---The LED indicator lights up red when transmitting, and lights up green when receiving.

K. SPEAKER/MICROPHONE JACKS

Basic Operations

Power/Volume Knob

- Clockwise rotate the knob and hear a click sound, the radio is turned on. Anticlockwise rotate the knob and hear a click sound, the radio is turned off.
- In the power-on state, rotate the volume knob to adjust the volume.

Channel Selection

- Clockwise rotate the knob to increase the channel from 1-16. Anticlockwise rotate the knob to decrease the channel from 16-1.
- When receiving the signal, the indicator lights up green and the speaker outputs the voice.

PTT Key

Press the PTT key and keep the microphone away from the mouth 3-8cm. Speak towards the microphone in a normal voice to make the receiver get the best communication audio.

Monitor

Monitor function: users receive the communication from the specified channel. In the power-on state, define the UP or Down key as the Monitor through the CPS.

Scan

In the power-on state, define the UP or Down key as the Scan through the CPS. Long press the side key for 2.5s and hear the ON prompt, 1-16 channels will auto-increment enter scan mode. The radio will start scanning from the current channel. When scanning the matched carrier and CTCSS/DCS signal, communication is achieved. No pressing the PTT key or not receiving the signal in 4s, the radio will continue to scan. In scan mode, long press the key for 2.5s and hear the OFF prompt, the radio exits scan mode. (Note: when the scan adds less than 2, the radio cannot scan)

- Carrier scan: When the radio detects a signal, it will stop scanning and keep on the same frequencies until the signal disappears. Between the disappeared signal and scan restoration have a 4-second delay.

VOX Function

The VOX function refers to speaking towards the radio without pressing the PTT key to transmit. In the power-on state, long press the Down key for 2.5s and hear the prompt VOX-ON/OFF.

- VOX level refers to the voice sensitivity of the radio. 1-9 levels can be selected through the CPS. If you choose OFF, the VOX function cannot turn on manually. The level 9 is the most sensitive.

Channel Lock

Long press the UP key for 2.5s and hear two beep sounds, the channel lock turns on. When turning on the function, the channel knob is valid. Long press the key for 2.5s and hear a beep sound, the channel lock turns off.

Emergency Alarm

Long press the UP key for 2.5s to turn on the alarm function. The corresponding channel radio will receive the alarm signal and hear the alarm sound from the radio. Press the PTT key to exit.

Flashlight

Shortly press the Down key to turn on the LED flashlight. Shortly press the Down key again to turn it off.

Battery and Channel Display

Check the battery and channel through the hidden display.

High/Low Power Selection

Set high/low power. FRS radio switches high/low power through the CPS. PMR446 radio has no high/low power selection.

Busy Channel Lockout

The function prevents blocking other conversations from the same channel. Users can set it through the CPS. Set Yes or No in the channel information setting. If you choose Yes, the channel receives the signal and when you press the PTT key, the radio cannot transmit and sends a toot sound. If you choose No, the above situations will disappear.

Battery Save

When the radio has no received signal in receive state, it will reduce battery power consumption by reducing the receive circuit. It will extend the use time after being fully charged once. The function can check in the Battery save of the CPS.

Low Battery Alert

When battery power is low, the radio will send voice prompt if it has voice broadcasting. The radio will prohibit transmitting when appearing the low battery alert. Please change or charge the battery.

TOT

TOT aims to prevent using a channel for too long. TOT time can be set through the CPS (30s, 60s,..., 180s; interval is 30s). If you continuously transmit to TOT time, the radio will stop transmitting and send the warning sound. To stop the warning sound, release the PTT key. Press the PTT key again to restore transmission.

CTCSS/DCS

The radio is 50 CTCSS and 210 DCS codes optional.

It is effective to set DCS codes on the channel (set the CTCSS codes on the channel or no setting it is valid). The function has common signaling and special signaling optional.

Common signaling refers to that the DCS codes on the channel are normal. It can talk to the other radios set the same DCS codes.

One-key Pairing

- Adjust the radio channel to 1 and turn off the radio. Press the UP key and turn on the radio. The indicator slowly lights up green, and the radio enters pairing mode. Any radio transmits, when the radio receives the signal and two radios talk normally, a channel pairs successfully. Switch channels to pair continuously. After finishing, turn on the radio again to use it normally.

Display Function

- Check the channel and battery through the hidden display.

Specifications

General	
Frequency Range	FRS:462 / PMR:446MHz
Rated Voltage	DC3.7V (Rechargeable Li-ion battery)
Memory Channels	16
Antenna	Built-in antenna
Antenna Impedance	50Ω
Work Method	Same frequency simplex or different frequency simplex
Ground Method	Negative pole
Dimension	150×58.5×34.5mm

Transmit	
Output Power	2W±0.3 / 0.5W±0.1
Modulation Method	FM 8KΦF3E
FM Limitation	≤5kHz/±2.5kHz
Rest FM	-45dB/-35dB
Adjacent Power	-65dB/-55dB
Spurious & Hsupplyonic	≤-36dBm
FM Distortion	≤5%

Receive	
Receive Sensitivity	≤0.7μV (12dB SINAD)
Rated Audio Output Power	≥600mW
Rated Audio Distortion	≤5%
SNR	≥55dB
Spurious Response Suppression	40dB / 35dB
Adjacent Selectivity	≥60dB

Frequency Allocation (FRS 16H)

CH	Frequency	CTCSS/DCS	Power
1	462 . 5625	67.0	High
2	462 . 5875	118.8	High
3	462 . 6125	127.3	High
4	462 . 6375	131.8	High
5	462 . 6625	136.5	High
6	462 . 6250	127.3	High
7	462 . 7250	136.5	High
8	462 . 6875	141.3	High
9	462 . 7125	146.2	High
10	462 . 5500	123.0	High
11	462 . 5750	D743I	High
12	462 . 6000	D332I	High
13	462 . 6500	D243I	High
14	462 . 6750	D606N	High
15	462 . 7000	D731I	High
16	462 . 7250	D462I	High

▲Note: If the specifications change due to technology improvement, don't inform users again.

EN: RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE

EN: Before using this device, please read this guide which contains important operating instructions for safe usage, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards.

EN: User's instructions should accompany the device when transferred to other users.

Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority granted by the local government radio management departments to operate this radio and should not be made. To comply with the corresponding requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the local government radio management departments equipment authorization for this radio could violate the rules.

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

EN: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage;
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

• (Simple EU declaration of conformity) Shenzhen Retevis Technology Co., Ltd. declares that the radio equipment type is in compliance with the essential requirements and other relevant provisions of RED Directive 2014/53/EU and the ROHS Directive 2011/65/EU and the WEEE Directive 2012/19/EU; the full text of the EU declaration of conformity is available at the following internet address: www.retevis.com.

For the intended country of use, please refer to the package.

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, or accumulators must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws and rules in your area.



RF Safety

This two-way radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. RF energy, which when used improperly, can cause biological damage. Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits: <http://www.who.int/en/energy-exposure> only when transmitting in terms of measuring for standards compliance. For users who wish to further reduce their exposure, some effective measures to reduce RF exposure include:

- Reduce the amount of time spent using your wireless device.
- Use a speakerphone, earpiece, headset, or other hands-free accessory to reduce proximity to the head (and thus head exposure). While wired earpieces may conduct some energy to the head and wireless earpieces also emit a small amount of RF energy, both wired and wireless earpieces remove the greatest source of RF energy (handheld device) from proximity to the head and thus can greatly reduce total exposure to the head.
- Increase the distance between wireless devices and your body.

This radio is designed for and classified as "General population/uncontrolled use". General population/uncontrolled environments are defined as locations where there is exposure of individuals who have no knowledge or control of RF exposure level.

To control your exposure and ensure compliance with the controlled environment exposure limits, always adhere to the following procedure:

-To receive calls, release the PTT button.

-To transmit (talk), press the Push-to-Talk (PTT) button in front of the face.

-Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) at least one inch (2.5 centimeters) away from the nose or lips.



Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility. During transmissions, your radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so, such as hospitals or healthcare facilities.

Persons with pacemakers, implantable cardioverter defibrillators (ICDs) or other active implantable medical devices should.

- Consult with their physicians regarding the potential risk of interference from radio frequency transmitters, such as portable radios (poorly shielded medical devices may be more susceptible to interference).

- Turn the radio OFF immediately if there is any reason to suspect that interference is taking place.

- Do not carry the radio in a chest pocket or near the implantation site, and carry or use the radio on the opposite side of the body from the implantable device to minimize the potential for interference.

Hearing Aids: Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices: If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Turn off your radio in the following conditions:

- Turn off your radio prior to entering any area with a potentially hazardous or explosive atmosphere. Only radio types that are especially qualified should be used in such areas as “Intrinsically Safe”.

Note: the areas with potentially explosive atmosphere referred to above include blasting caps, blasting areas, inflammable gas, dust particles, metallic powders, grain powders, fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles (such as grain, dust or metal powders) and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often – but not always posted.

- Turn off your Radiocommunication device when taking on fuel or parked at gasoline service stations.

- Turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

- Do not use any radio that has a damaged antenna. If a damaged antenna comes into contact with the skin when the radio is in use, a burn can result.

- Turn off your radio before removing or installing accessories.
- When the transceiver is used for long transmissions, the radiator and chassis will become hot.

Always check the laws and regulations on the use of radios in the areas where you drive. Use of Communication Devices, for example, mobile radio, may not be allowed.

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call, if driving conditions or regulations so require.
- Do not place a portable radio in the area over an air bag or in the airbag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the airbag inflates.



Use the lowest volume necessary to do your job. Turn up the volume only if you are in noisy surroundings.

- Limit the amount of time you use headsets or earpieces at high volume.
- When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear.

• Use carefully with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss.



CAUTION: Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the radio's volume, the less time is required before your hearing could be affected. Hearing damage from loud noise is sometimes undetectable at first and can have a cumulative effect.

• **WARNING: KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.**

- In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.
- If a radio or a battery has been submerged in water, please dry and clean it before use. Do not dry the radio or battery with an appliance or heat source, such as a hair dryer or microwave oven. If the radio has been submersed in a corrosive substance (e.g. saltwater), rinse the radio and battery in fresh water, then dry them.
- Since batteries are sensitive to high temperatures when storing them, keep them in a cool and dry place. The recommended temperature should be between +10 °C and +25 °C and never exceed +30 °C. Batteries should therefore not be stored next to radiators or boilers nor in direct sunlight. Extremes of humidity (below 35% and above 95% relative humidity for sustained periods) should be avoided since they are detrimental to both batteries and packing. Although the storage life of batteries at room temperature is good, storage is improved at lower temperatures provided special precautions are taken. Also, accelerated warming is harmful.

Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas; A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

Turn off your radio before removing or installing a battery. Store spare batteries securely. Dispose of used batteries immediately and safely.

- The battery supply terminals are not to be short-circuit.
- Do not replace the battery in any area labeled "Hazardous Atmosphere". Any sparks created in a potentially explosive atmosphere can cause explosion or fire.



- When the conductive material such as jewelry, keys or chains touches exposed terminals of the batteries, may complete an electrical circuit (short circuit the battery) and become hot to cause bodily injury such as burns. Exercise care in handling any battery, particularly when placing it inside a pocket, purse or other container with metal objects;

- Dirty battery contacts need to be wiped with clean dry cloth, both on the battery and in the appliance.
- Batteries should be removed from the appliance when not being used for long periods of time (months). The batteries should be enclosed in special protective packaging (such as sealed plastic bags or variants) which should be retained to protect them from condensation during the time they are warming to ambient temperature.

- Exhausted batteries are to be removed from the equipment.
- Do not dismantle, open or shred batteries. Batteries should be dismantled only by trained people.
- Disposal of a battery into fire, or a hot oven, or mechanically crushing or cutting of a battery, that can result in explosion;
- Turn off your radio before charging.
- Batteries shall be charged at 10°C~40°C environment temperature specified. If the environment temperature is lower than 0°C, the charge shall be prohibited.

- Rechargeable batteries need to be charged with a dedicated charger provided for each piece of equipment before you first use them.
- Rechargeable batteries are only to be charged by adults or by children at least 8 years old under adult supervision.
- Pull by the plug rather than the cord when disconnecting the charger.
- Unplug the charger from the AC outlet before attempting any maintenance or cleaning

Do not use the charger outdoors or in moist environments, use only in dry locations/conditions.

- Do not disassemble the charger, which may result in a risk of electrical shock or fire. A charger should be dismantled only by trained people.
- Do not operate the charger if it has been broken or damaged in any way.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of a fire and/or electric shock. If an extension cord must be used, make sure that:

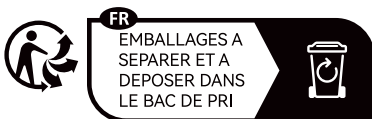
- The pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.
- The extension cord is properly wired and in good condition.
- Make sure the cord is located so it will not be stepped on, tripped over or subjected to damage or stress.

WARNING: CHOKING HAZARD-Small Parts.
Not suitable for children under 3 years old.



The plug of the adapter is considered a disconnect device. The socket-outlet shall be installed near the equipment and shall be easily accessible.

- Contact Retevis for assistance regarding repairs and service.
- For a list of Retevis-approved accessories for your radio model, visit the website: <http://www.Retevis.com>



Points de collecte sur www.quefairedemesdechets.fr
Privilégiez la réparation ou le don de votre appareil !

Guarantee

Model Number: _____

Serial Number: _____

Purchasing Date: _____

Dealer: _____ Telephone: _____

User's Name: _____ Telephone: _____

Country: _____ Address: _____

Post Code: _____ Email: _____

Remarks:

- 1.This guarantee card should be kept by the user, no replacement if lost.
- 2.Most new products carry a two-year manufacturer's warranty from the date of purchase. Further details, pls read <http://www.retevis.com/after-sale/>
- 3.The user can get warranty and after-sales service as below:
 - Contact the seller where you buy.
 - Products Repaired by Our Local Repair Center
- 4.For warranty service, you will need to provide a receipt proof of purchase from the actual seller for verification

Exclusions from Warranty Coverage:

- 1.To any product damaged by accident.
- 2.In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs.
- 3.If the serial number has been altered, defaced, or removed.



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MADE IN CHINA